

$\Lambda_b(6152)^0$ $J^P = \frac{5}{2}^+$ Status: ***

Quantum numbers are based on quark model expectations.

 $\Lambda_b(6152)^0$ MASS **$\Lambda_b(6152)^0$ MASS**

VALUE (MeV)

6152.5 ±0.4 OUR AVERAGE

6152.7 ±1.2 ±0.2

6152.51±0.26±0.27

¹ SIRUNYAN 20K measures $m(\Lambda_b(6152)^0) - m(\Lambda_b^0) = 533.1 \pm 1.1 \pm 0.4$ MeV. We have adjusted the measurement to our best value of $m(\Lambda_b^0) = 5619.60 \pm 0.17$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.

² Observed in $\Lambda_b^0 \pi^+ \pi^-$ mode.

DOCUMENT ID	TECN	COMMENT
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¹ SIRUNYAN 20K CMS $p\bar{p}$ at 13 TeV
² AAIJ 19AJ LHCb $p\bar{p}$ at 7, 8, 13 TeV **$m_{\Lambda_b(6152)^0} - m_{\Lambda_b^0}$**

VALUE (MeV)

532.89±0.26±0.10

DOCUMENT ID	TECN	COMMENT
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¹ AAIJ 19AJ LHCb $p\bar{p}$ at 7, 8, 13 TeV¹ Observed in $\Lambda_b^0 \pi^+ \pi^-$ mode. **$m_{\Lambda_b(6152)^0} = m_{\Lambda_b(6146)^0}$**

VALUE (MeV)

6.34±0.32±0.02

DOCUMENT ID	TECN	COMMENT
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¹ AAIJ 19AJ LHCb $p\bar{p}$ at 7, 8, 13 TeV **$\Lambda_b(6152)^0$ WIDTH**

VALUE (MeV)

2.1±0.8±0.3

DOCUMENT ID	TECN	COMMENT
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¹ AAIJ 19AJ LHCb $p\bar{p}$ at 7, 8, 13 TeV¹ Observed in $\Lambda_b^0 \pi^+ \pi^-$ mode. **$\Lambda_b(6152)^0$ DECAY MODES**

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \Lambda_b^0 \pi^+ \pi^-$	seen

 $\Lambda_b(6152)^0$ BRANCHING RATIOS **$\Gamma(\Lambda_b^0 \pi^+ \pi^-)/\Gamma_{\text{total}}$**

VALUE

seen

seen

DOCUMENT ID	TECN	COMMENT
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¹ SIRUNYAN 20K LHCb $p\bar{p}$ at 13 TeV
² AAIJ 19AJ LHCb $p\bar{p}$ at 7, 8, 13 TeV **Γ_1/Γ**

$\Lambda_b(6152)^0$ REFERENCES			
SIRUNYAN AAIJ	20K 19AJ	PL B803 135345 PRL 123 152001	A.M. Sirunyan <i>et al.</i> R. Aaij <i>et al.</i> (CMS Collab.) (LHCb Collab.)

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NODE=B188M

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